



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,661	03/18/2004	Serge J.A. Bierhuizen	107773-130250	8008

25943 7590 02/22/2006

SCHWABE, WILLIAMSON & WYATT, P.C.
PACWEST CENTER, SUITE 1900
1211 SW FIFTH AVENUE
PORTLAND, OR 97204

EXAMINER

DUNWIDDIE, MEGHAN K

ART UNIT	PAPER NUMBER
----------	--------------

2875

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/804,661	BIERHUIZEN, SERGE J.A.	
	Examiner	Art Unit	
	Meghan K. Dunwiddie	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20-23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) 6-14, 19 and 24-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/09/04&09/16/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the election filed on October 31, 2005 by **Bierhuizen**.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on August 9, 2004 and September 16, 2005 are in compliance with the provisions of 37 CFR 1.97, and accordingly, the information disclosure statements have been considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show **display 14** in Figure 5 as described in the specification [See page 9 paragraph [0031]]. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if

Art Unit: 2875

only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because it is not a concise statement of the technical disclosure of the application and it does not include that which is new in the art to which the invention pertains. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Election/Restrictions

7. Claims 19 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 31, 2005.

Art Unit: 2875

8. Claims 6-12 are withdrawn from further consideration as being drawn to a nonelected species. Applicant elected Species 4, which is drawn to Figure 4c, and Claims 6-12 do not read on Figure 4c because it does not show “**a relay optical arrangement**” as claimed. It appears to the examiner that Claims 6-12 read on Figure 6.

9. Claims 13 and 14 are withdrawn from further consideration as being drawn to a nonelected species. Applicant elected Species 4, which is drawn to Figure 4c, and Claims 13 and 14 do not read on Figure 4c because it does not show “**a quarter wave plate**” as claimed. It appears to the examiner that Claims 13 and 14 read on Figure 8.

10. Claim 25 is dependent on Claim 24, which is drawn to a nonelected species and withdrawn, as such Claim 25 is withdrawn from further consideration as well.

11. Claims 26-30 are withdrawn from further consideration as being drawn to a nonelected species. Applicant elected Species 4, which is drawn to Figure 4c, and Claims 26-30 do not read on Figure 4c because it does not show “**a video unit**” as claimed. It appears to the examiner that Claims 26-30 read on Figure 9.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2875

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-5, 15-18, and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by **Penn et al.** (US 2002/0093499).
14. In reference to Claims 1, 20, and 22, **Penn et al.** shows an apparatus comprising:
- A light source to generate light [Figure 7: (702)];
 - A transfective color filter [Figure 7: (708)] optically coupled to the light source, to receive the light along an incident axis, said transfective color filter including at least one color passband to transmit at least a portion of light within a range of frequencies, and to reflect, along a reflectance axis, at least a portion of light outside of the range of frequencies, with the incident and the reflectance axes being non-coincident [See Figure 7];
 - And a recycling subsystem [See page 3 paragraph [0040] in reference to Figure 5] optically coupled to the transfective color filter [Figure 7: (708)], having an input positioned on the reflectance axis and an output, the recycling subsystem to receive the reflected light through the input, and to emit recycled light through the output towards the transfective color filter [See Figure 7].

Art Unit: 2875

15. In reference to Claim 2, **Penn** et al. shows:

- The transfective color filter is one of a group consisting of a rotating color drum, a rotating spiral color wheel, and a band modulation filter [See page 1 paragraph [0007]].

16. In reference to Claim 3, **Penn** et al. shows:

- The transfective color filter includes at least one of a group consisting of a red, green, and a blue passband [See page 2 paragraph [0027] lines 7-9].

17. In reference to Claim 4, **Penn** et al. shows:

- A display optically coupled to the transfective color filter to receive the transmitted light from the transfective color filter [See Figure 7].

18. In reference to Claim 5, **Penn** et al. shows:

- The display is a transmissive liquid crystal light valve [Figure 7: (718)].

19. In reference to Claim 15, **Penn** et al. shows:

- A first optical integrator including an input and output aperture, the input aperture to receive light from the light source, and the output aperture to transmit light toward the transfective color filter [Figure 7: (706)].

Art Unit: 2875

20. In reference to Claim 16, **Penn et al.** shows:

- A second optical integrator having a first end to receive the reflected light from the transfective color filter [Figure 7: (712)].

21. In reference to Claims 17 and 21, **Penn et al.** shows:

- The recycling subsystem includes a mirror placed on or near a second end of the second optical integrator to reflect light back through the second optical integrator towards the first end and out towards the transfective color filter [Figure 8: (711)].

22. In reference to Claim 18, **Penn et al.** shows:

- The recycling subsystem includes an optical element to image the reflected light from the transfective color filter on the first end of the second optical integrator [Figure 8: (711)].

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Penn et al.** (US 2002/0093499).

Art Unit: 2875

25. Regarding Claim 20, this claim is considered to be the obvious method of assembling the lighting apparatus of Claim 1 and as such is similarly rejected.

26. Regarding Claim 21, this claim is considered to be the obvious method of assembling the lighting apparatus of Claim 17 and as such is similarly rejected.

27. Regarding Claim 22, this claim is considered to be the obvious method of assembling the lighting apparatus of Claim 1 and as such is similarly rejected.

28. Regarding Claim 23, this claim is considered to be the obvious method of assembling the lighting apparatus of Claim 1 and as such is similarly rejected.

Conclusion

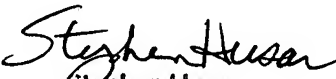
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKD


Stephen Huzar
Primary Examiner